



TITLE:

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A CASE OF NODULAR FASCIITIS OF THE BLADDER

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A case of nodular fasciitis occurring at the bladder vertex in a 34-year-old male is reported. The tumor was about 1 cm in diameter. A urachal tumor was diagnosed, and excised en bloc from the umbilicus to the bladder vertex. This tumor was diagnosed as nodular fasciitis from the histopathological findings. No recurrence has been seen for 3 years. Nodular fasciitis occurs mainly in the limbs or trunk. Occurrence in the bladder is very rare. Only 14 cases (including our case) of nodular fasciitis occurring in the bladder are known.

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Key words: Nodular fasciitis, Bladder tumor

INTRODUCTION

Nodular fasciitis is a relatively rare type of mesenchymal tumor, and is considered to be a benign disease. In 1955, it was reported by Konwaler et al.¹⁾ as "subcutaneous pseudosarcomatous fibromatosis (fasciitis)". It is also called "pseudosarcomatous fasciitis" or "proliferative fasciitis", and at present "nodular fasciitis" is the term in general use. Nodular fasciitis occurs mainly in the limbs and the trunk, but we now report a case occurring in the submucosa of the bladder vertex.

CASE REPORT

The patient was a 34-year-old male who presented with the chief complaint of asymptomatic macroscopic hematuria. He had undergone an operation for fistula ani at the age of 29 years, but his past history was otherwise unremarkable. Since asymptomatic macroscopic hematuria persisted for 2 days, he was examined at our clinic and hospitalized for further examination and treatment. Cystoscopy showed a non-papillary tumor with an ulcer at the bladder vertex (Fig. 1), and a punch biopsy was performed. The histopathological diagnosis was granulomatous polyp. Ultrasonography of the abdomen showed a cord-like structure which was continuous

with the tumor at the bladder vertex and directed towards the navel. From the above findings, a urachal tumor was diagnosed, an excised en bloc from the umbilicus to the bladder vertex. Examination of the excised specimen showed that the tumor was about 1 cm in diameter, spherical, and had a gray-white cut surface. The lesion was localized to the bladder wall. Microscopy (Fig. 2) showed erythrocytic masses that were proliferating in an apparently infiltrative manner and no capsule was noted. In addition, lymphocytic infiltration was noted. In the edematous

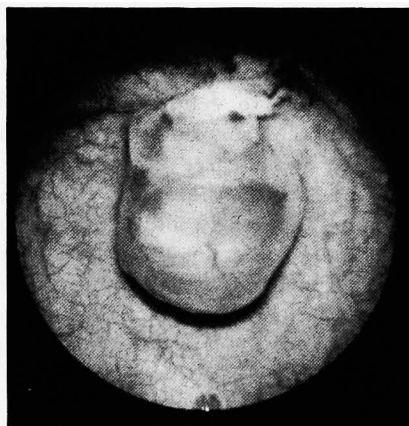


Fig. 1. Cystoscopy done at admission showing a non-papillary tumor with an ulcer at the bladder vertex.

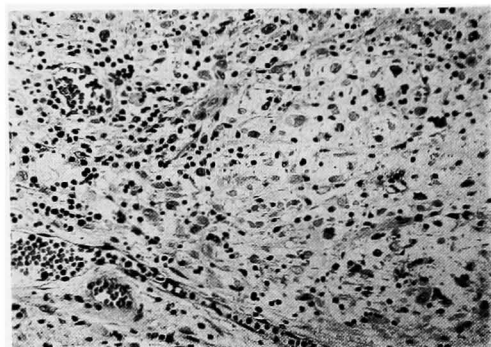


Fig. 2. Microscopy shows lymphocytic infiltration and spindle-shaped stellate fibroblast-like cells.

stroma, spindle-shaped stellate fibroblast-like cells were also noted. Some mitotic figures were also noted, but there was no nuclear atypia. Alcian-blue staining showed that the stroma contained abundant mucopolysaccharides. From the above histopathological findings, this lesion was diagnosed as nodular fasciitis occurring in the vesical wall.

DISCUSSION

In 1955, Konwaler et al. reported eight patients with tumor-like lesions occurring localized subcutaneously as "subcutaneous pseudosarcomatous fibromatosis (fasciitis)". Thereafter, similar cases were reported with the designations of pseudosarcomatous fasciitis or proliferative fasciitis, and at present the condition is known as nodular fasciitis.

Nodular fasciitis appears as spherical to elliptical firm tumors with a color varying from gray-white to yellowish white. The border with the surrounding tissue may be clear in some cases and indefinite in others. The histopathological characteristics include apparently infiltrative fibroma-like proliferation, fibroblastic proliferation, erythrocytic extravasation, myxoma-like degeneration infiltration of inflammatory cells, and the appearance of multinucleated giant cells. However, the appearance of giant cells is not obligatory. In 1972, Allen²⁾ reported the classification of nodular fasciitis in 829 cases by the site of occurrence, with 46% occurring in the up-

per limb, 13% in the lower limb, 20% in the trunk, 20% in the cranio-cervical region, and only 6 cases (1%) occurring in other sites (esophagus, vagina, lip, oral mucosa, and uterus). Occurrence in the bladder is very rare. Our search of the literature, revealed only 14 cases (including our case) of nodular fasciitis occurring in the bladder including those with a possible diagnosis³⁻¹¹⁾. In some previous reports, this disease was reported as "inflammatory pseudosarcoma" or "pseudosarcomatous fibromyxoid tumor", but it should be called "nodular fasciitis of the bladder"¹²⁾.

This disease shows infiltrative proliferation, but is actually an inflammatory reaction and seems to be benign in nature. However, it has few characteristic clinical findings, and is often treated simply as a tumor or sarcoma until excision is performed and a histopathological diagnosis is made. In the treatment of nodular fasciitis, simple excision is considered to be sufficient, but since it resembles sarcoma it is important to diagnose malignancy correctly in the preoperative period. Unnecessary extensive excision should be avoided, but the risk of overlooking a true sarcoma must always be considered. In our case, there was no history of trauma or operations (no factor predisposing to granuloma in the bladder), and urachal tumor was suspected strongly from the fact that the site of occurrence was the vertex. Accordingly en bloc excision was performed from the umbilicus to the bladder vertex to obtain a radical cure. The post-operative course was good, and no recurrence has been seen for 3 years. In the future, we will follow up this patient by cystoscopy.

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和文抄録

膀胱に発生した結節性筋膜炎の1例

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34歳，男性の膀胱頂部に発生した直径約1cmの結節性筋膜炎の1例を経験したので報告する。尿管腫瘍が疑われ臍から膀胱頂部にかけての en bloc 摘除手術を行った。病理組織学的に結節性筋膜炎と診断した。手術後3年間，再発を認めない。結節性筋膜炎は

おもに四肢・体幹に発生し，膀胱の結節性筋膜炎は稀で文献上，われわれの症例を含め14例の報告例があるのみである。

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